

v. Control Center

The RHIC control center, in Building 1005S, will be the location of both the principal commissioning effort and the routine operation of the collider. It serves as a hub for communications and the network connections to the rest of the facility. Central facilities for shared network services will also be located in Building 1005S.

The control center will have four independent consoles which will be functionally equivalent to one another. Each console will have enough dedicated computer power (memory and speed) for most of the computing work that will be done at a console. Operations program libraries and temporary file space will be provided at each console. The optimal allocation of resources to highly compute-intensive modeling applications will require the provision of a networked, "compute server" configuration. In addition, the control center will have the appropriate configuration of database, file, message, and alarm servers. All control center console and server computers will be provided with full-bandwidth connections compatible with the network backbone. The consoles will have high resolution color screens for display of graphics. The screens will support a mouse or trackball-driven graphical user interface (GUI), and it is likely that these screens will be able to share input devices (mouse and keyboard) with one another. One color screen at each console will be dedicated to alarms. Each console will have additional color graphic screens for monitors and comfort displays, which need not have any associated manual input. Each console will have a suitable tabletop with drawer(s) and standard telephone and intercom equipment. Space will be provided at each console for some special equipment used to support machine studies. Timing system interfaces may be required for access to accelerator events for triggering such equipment. The number of display screens and the configuration of special equipment may differ among the consoles, but the basic functionality will be the same. Printing facilities may be individual in the case of a laser printer, or shared in the case of a color printer.

Safety and access control equipment will be located in the control room at a dedicated console provided by the Safety Section.